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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/053,750	01/21/2002	Morton M. Mower	2206-001 C	6121
22208	7590	12/23/2008	EXAMINER	
ROBERTS, MARDULA & WERTHEIM, LLC 11800 SUNRISE VALLEY DRIVE SUITE 1000 RESTON, VA 20191				GETZOW, SCOTT M
3762		ART UNIT		PAPER NUMBER
12/23/2008		MAIL DATE		DELIVERY MODE
				PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/053,750	MOWER, MORTON M.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Scott M. Getzow	3762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 22 September 2008.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 12-14, 18-22 and 58-66 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 12-14, 18-22, 58-66 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                      |                                                                   |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ .                                    |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____.                                                         | 6) <input type="checkbox"/> Other: _____ .                        |

***Claim Rejections - 35 USC § 103***

1. Claims 59,61-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scherlag (5,320,642) in view of Duggan (4,402,322).

Scherlag teaches the ability to stimulate the heart with excitatory pulses as well as non-excitatory pulses and constant current DC. The non-excitatory stimulation has an amplitude below a level needed to excite tissue, see column 2. Duggan teaches biphasic stimulation of a patient's heart, see figure 3. To use the biphasic pulses of Duggan in place of the non-excitatory pulses of Scherlag would have been obvious since such would merely be the substitution of one known prior art element for another, yielding a predictable result. Duggan shows that biphasic stimulation is known in the prior art, and would provide non-excitatory stimulation to the patient's tissue when the amplitude of such biphasic pulses is reduced, as is taught in Scherlag.

2. Claims 58,60,65,66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scherlag (5,320,642) in view of Duggan (4,402,322), and further in view of Nichols et al (5,374,282).

It would have been obvious to use oxygen and pressure sensors, as taught in Nichols, with the device of Scherlag and Duggan for reasons mentioned in the previous office action.

***Claim Rejections - 35 USC § 102***

3. Claims 12-14,18-20,22 are rejected under 35 U.S.C. 102(b) as being anticipated by Freeman (5,205,284).

See previous office action.

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Applicant's remarks have been considered, however the above rejections are still deemed to be proper. Applicant principally argues that Freeman does not teach the non-excitatory stimulation to be the first phase of a biphasic pacing pulse. However, the pulses 90 are considered to be biphasic with a period TB, as shown in figure 2. Also, the pulses 90 can be applied at times other than the times when pulses 80 are applied

(which are synchronized to the heart), and therefore the pulses 90 can be interpreted as being 'synchronous' to the heart as well, especially since the term 'synchronous' can have a broad meaning. Further, the term 'pacing' used before the word 'pulse' in applicant's claims can also be broadly interpreted. As shown in figures 6a-6c of Freeman, all of the individual pulses in the pulse train are considered by Freeman to be pacing pulses, whether or not any individual pulse in the train is above or below the threshold to stimulate the tissue. Thus, the term 'pacing pulse' can be interpreted to be almost any type of pulse, and the word 'pacing' could be interpreted as mere intended use of the pulse. The pulses of Freeman need not be shown to actually pace the heart to be construed as being able to pace the heart under the appropriate circumstances.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott M. Getzow whose telephone number is (571) 272-4946. The examiner can normally be reached on M-F, 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on (571) 272-4955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Scott M. Getzow/  
Primary Examiner, Art Unit 3762